

Claims

1. A sole for an article of footwear, the sole comprising:  
a sole layer; and  
a mesh layer at least partially embedded in the sole layer.
2. The sole of claim 1, wherein the mesh layer comprises a contoured surface.
3. The sole of claim 1, wherein the mesh layer comprises a knit structure formed from thread.
4. The sole of claim 3, wherein the thread comprises a plurality of spun fibers.
5. The sole of claim 1, wherein the mesh comprises a material selected from the group consisting of metals, polyesters, polyamides, aramids, and combinations thereof.
6. The sole of claim 1, wherein at least a portion of the mesh layer extends beyond a bottom surface of the sole layer.
7. The sole of claim 1, wherein the mesh layer is substantially coterminous with a bottom surface of the sole layer.
8. The sole of claim 1, wherein the sole layer comprises a profile groove defined by a bottom surface of the sole layer.
9. The sole of claim 1, wherein the sole layer comprises a damping material.
10. The sole of claim 9, wherein the damping material comprises a material selected from the group consisting of ethylene vinyl acetate, polyurethane, rubber, and combinations thereof.
11. An article of footwear comprising:  
an upper;  
a sole layer attached to the upper; and  
a mesh layer at least partially embedded in the sole layer.
12. The article of claim 11, wherein the mesh layer comprises a contoured surface.
13. The article of claim 11, wherein the mesh layer comprises a knit structure formed from thread.
14. The article of claim 13, wherein the thread comprises a plurality of spun fibers.
15. The article of claim 11, wherein the mesh comprises a material selected from the group consisting of metals, polyesters, polyamides, aramids, and combinations thereof.
16. The article of claim 11, wherein at least a portion of the mesh layer extends beyond a bottom surface of the sole layer.

1 17. The article of claim 11, wherein the mesh layer is substantially coterminus with a bottom  
2 surface of the sole layer.

1 18. The article of claim 11, wherein the sole layer comprises a profile groove defined by a  
2 bottom surface of the sole layer.

1 19. The article of claim 11, wherein the sole layer comprises a damping material.

1 20. The article of claim 19, wherein the damping material comprises a material selected from  
2 the group consisting of ethylene vinyl acetate, polyurethane, rubber, and combinations thereof.

1 21. A method for manufacturing a sole for an article of footwear, the method comprising the  
2 steps of:

3 providing a mold;

4 inserting a mesh into the mold; and

5 forming a sole layer in the mold, the sole layer having a mesh layer at least partially  
6 embedded in the sole layer.

1 22. The method of claim 21, further comprising the step of applying the mesh to an inner  
2 surface of the mold.

1 23. The method of claim 21, further comprising the step of providing a mold having an inner  
2 surface structure complementary to the mesh.

1 24. The method of claim 21, further comprising the step of providing a mold having an inner  
2 surface structure for forming profile grooves in a bottom surface of the sole layer.

1 25. The method of claim 21, wherein at least a portion of the mesh layer extends beyond a  
2 bottom surface of the sole layer.

1 26. The method of claim 21, wherein the mesh layer is substantially coterminus with a  
2 bottom surface of the sole layer.

1 27. The method of claim 21, further comprising the step of forming the sole layer in the mold  
2 by injection molding.

1 28. The method of claim 21, further comprising the step of forming the sole layer in the mold  
2 by compression molding.

1 29. A method for manufacturing an article of footwear, the method comprising the steps of:  
2 providing a mold;  
3 inserting a mesh into the mold;

forming a sole layer in the mold, the sole layer having a mesh layer at least partially embedded in the sole layer; and  
attaching an upper to the sole layer.

30. The method of claim 29, further comprising the step of applying the mesh to an inner surface of the mold.

31. The method of claim 29, further comprising the step of providing a mold having an inner surface structure complementary to the mesh.

32. The method of claim 29, further comprising the step of providing a mold having an inner surface structure for forming profile grooves in a bottom surface of the sole layer.

33. The method of claim 29, wherein at least a portion of the mesh layer extends beyond a bottom surface of the sole layer.

34. The method of claim 29, wherein the mesh layer is substantially coterminous with a bottom surface of the sole layer.

35. The method of claim 29, further comprising the step of forming a sole layer in the mold by injection molding.

36. The method of claim 29, further comprising the step of forming a sole layer in the mold by compression molding.

add a<sup>3</sup>